

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (AE) (2012 to 2017) (Sem.-3)

MANUFACTURING PROCESSES

Subject Code : BTAE-304

M.Code : 54112

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**Write briefly :**

1. What is casting?
2. Draw a sketch of a typical mould and name its principal parts.
3. Name any two different cores.
4. Classify welding processes.
5. Briefly explain the principle of working of electric arc welding.
6. Write any two welding defects along with their causes and remedies.
7. What is extrusion?
8. What is meant by hot spinning?
9. Draw the sketch of single point cutting?
10. Briefly explain the principle of electro chemical machining.

SECTION-B

11. What is pattern? Discuss in brief two different patterns along with their sketches.
12. Explain the necessity of gating system in mould. Briefly explain different elements of gate and riser system with the help of neat sketch.
13. Discuss in brief the process of spinning with the help of neat sketch.
14. Explain with neat sketch the method of simple indexing.
15. Discuss in brief the working principle of abrasive flow machining with the help of neat sketch.

SECTION-C

16.
 - a) Briefly explain the process of sand casting.
 - b) Briefly explain the process of deep drawing with the help of neat sketch.
17.
 - a) Sketch and explain any one method of external cylindrical centerless grinding. What are the advantages and disadvantages of centerless grinding.
 - b) Explain the process of electric discharge machining with the help of neat sketch. Also give its application.
18. Write short notes on :
 - a) Centrifugal casting
 - b) Electron beam welding
 - c) Coolants

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.